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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>PH/8302INT</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/IB 2002/005733</b>	International filing date (day/month/year) <b>30-12-2002</b>	Priority date (day/month/year) <b>17-10-2002</b>
International Patent Classification (IPC) or national classification and IPC <b>H04L12/46</b>		
Applicant <b>NOKIA CORPORATION ET AL</b>		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
  - ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input checked="" type="checkbox"/> | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

Date of submission of the demand <b>10-05-2004</b>	Date of completion of this report <b>21-12-2004</b>
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer  <b>Ralf Boström /LR</b> Telephone No. +46 8 782 25 00

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

PCT/IB 2002/005733

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☐ the description:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

PCT/IB 2002/005733

## Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 32-34

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 32-34  
are so unclear that no meaningful opinion could be formed (*specify*):

The question whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable has not been examined in respect of claims 32 and 33 since the claims do not clearly define the subject matter for which protection is sought. Claims 32 and 33 contain references to the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here. Claim 34 does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. Thus, no examination of claim 34 has been performed.

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. \_\_\_\_\_

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in the Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

PCT/IB 2002/005733

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>2-17, 19-27, 29-31</u>	YES
	Claims	<u>1, 18, 28</u>	NO
Inventive step (IS)	Claims	<u>---</u>	YES
	Claims	<u>1-31</u>	NO
Industrial applicability (IA)	Claims	<u>1-31</u>	YES
	Claims	<u>---</u>	NO

## 2. Citations and explanations (Rule 70.7)

The application is concerned with a problem that when a user of a virtual private network (VPN) roams to a distant external part of the VPN he/she must manually select a preferred connection point to the VPN.

Documents cited in the International Search Report:

D1. US 2002069278 A1  
D2. WO 0105122 A1  
D3. WO 9859467 A2

D1, which is considered to represent the most relevant state of the art, discloses a mobile virtual private network in which the point of attachment of the mobile client to the mobile VPN is allowed to change (see the summary section). The system in D1 includes a number of mobile service routers (MSR). The MSR closest to a mobile client performs regular authentication checks of the mobile client during service execution. When the mobile clients move around they can change to which MSR they are connected/anchored (section [0094]). A change of connection point may be due to a volunteer hand-off initiated by an intra-domain routing process when discovering a new optimal route across the network (see claim 23).

D2 describes a method for allowing endpoints to move between different zones of a packet-switched network (see abstract). In D2 communication between local and remote endpoints are established via a first gatekeeper, which serves a first zone of the network. When an endpoint moves to a location served by a second gatekeeper a hand-off communication is performed between the first gatekeeper and the second gatekeeper.

.../...

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of: BOX V

D3 discloses a method for establishing connections between subscribers who are located in different zones of a network. A first user in a first zone managed by a first gatekeeper, who wishes to establish a connection to another user in another zone managed by a second gatekeeper, sends a request to the first gatekeeper. The request is forwarded to a zone management means. The zone management means requests the address from the second gatekeeper and returns an address confirmation, so that the connection may be set up (see abstract).

## Claim 1:

The MSRs in D1 corresponds to the first and second gateways in the application. The volunteer hand-off that occurs when a new optimal route is discovered in D1 corresponds to the "means for automatically changing the point through which the mobile workstation communicates with the internal portion of the network" in the application. Thus, the invention according to claim 1 is considered to lack novelty. The invention according to claim 1 is industrially applicable.

## Claims 18 and 28:

It is stated in these claims that a change of connection point (gateway) occurs because the new gateway is optimal for routing existing sessions. This is also the case in D1 (see for example claim 23). Thus, the invention according to claims 18 and 28 is considered to lack novelty. The invention according to claims 18 and 28 is industrially applicable.

## Claims 2-17, 19-27 and 29-31:

The features of these claims are regarded as measures obvious to the skilled person. Thus, the invention according to claims 2-17, 19-27 and 29-31 is considered to lack an inventive step. The invention according to claims 2-17, 19-27 and 29-31 is industrially applicable.